



TECHNICAL BULLETIN **Energy Codes** **Sunroom Additions, Revised February 11, 2003**

The requirements in this technical bulletin apply to sunroom additions to single-family residences.

As defined, a **sunroom** is a one-story structure added to an existing dwelling with a glazing area in excess of 40 percent of the gross area of the structure's exterior walls and roof.

As defined, a **thermal isolation** is a separation of conditioned spaces, between a sunroom addition and a dwelling unit, consisting of existing or new wall(s), doors and/or windows. New wall(s), doors and /or windows shall meet the values in the table below.

The following general rules apply:

- ❑ The sunroom addition shall be separated from the existing conditioned spaced by a **thermal isolation** as defined above.

The following applies to a conditioned (heated and/or cooled) sunroom:

- ❑ Conditioned sunroom additions shall be served by a separate heating or cooling system, or shall be controlled as a separate zone of the existing system.
- ❑ The *U*-factor of each new fenestration (window or door) may be used to calculate an area-weighted average fenestration *U*-factor for the addition, which cannot exceed the value in the table below.
- ❑ The *R*-values for new walls, ceilings and floors shall be as indicated it the table below.
- ❑ The area weighted average of all new and replacement glazing (where the entire unit, including the frame, sash and glazing, is replaced/installed) shall not exceed 0.4, except:
 - Any glazing facing within 45 degrees of true north,
 - Any glazing facing within 45 degrees of true south which is shaded along its full width by a permanent overhang with a projection factor of 0.3 or greater, or
 - Any fenestration with attached screens where the screens have a rated shading coefficient of 0.6 or less.

| Maximum | Minimum | | | | |
|----------------------------------|--|----------------------|-----------------------|---|--|
| Fenestration <i>U</i> -Factor | Ceiling <i>R</i> - value ^a | Wall <i>R</i> -value | Floor <i>R</i> -value | Basement Wall <i>R</i> -value ^b | Crawl space wall <i>R</i> -value ^d |
| 0.5 | R-30 | R-13 | R-19 | R-8 | R-10 |

^a "Ceiling *R*-value shall be required for flat or inclined (cathedral ceilings. Floors over outside air shall meet "Ceiling *R*-value requirements.

^b Basement wall insulation shall be installed in accordance with section 502.2.1.6.

^d "Crawl space wall *R*-value" shall apply to unventilated crawl spaces only. Crawl space insulation shall be installed in accordance with Section 502.2.1.5.